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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,093	08/30/2001	Satoshi Matoba	011051	5312

23850 7590 07/03/2003

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EXAMINER

JUSKA, CHERYL ANN

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 07/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/926,093

Applicant(s)

MATOBA ET AL.

Examiner

Cheryl Juska

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☒ Claim(s) 15 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 8 provides for the use of a pile fabric, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 8 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claim 1 is drawn to a multi-filament yarn comprising synthetic fibers of 3-30 denier per filament (dpf) and 100-750 denier per yarn. Said yarn has a twist frequency of 150 turns per meter (T/m) or less. Claim 2 limits the yarn to containing at least 50% by weight of filaments having a flat cross-section. Said flat filaments have a flat ratio of 2-25. Claim 3 limits the yarn to being coated with an oily agent having convergence-inducing properties. Claim 4 limits the yarn to being a non-twist filament of essentially no twist. Claim 5 limits the yarn to being acrylic-based.

Claim 6 is drawn to a pile fabric formed by knitting the yarn of any one of claims 1-5. Claim 7 limits the pile fibers to having essentially no crimp and a length of 5-100 mm. Claim 8 is drawn to a pile product using a pile fabric of claim 6.

Claim 9 is drawn to a method of making a mohair-like pile fabric by (a) twisting a synthetic multifilament yarn with a twist frequency of 150 T/m or less and (b) knitting said multifilament yarn into a pile fabric having a length of 5-100 mm. Claim 10 limits the knitting to a double stitch texture. Claim 12 limits the yarn to 3-30 dpf and 100-750 denier per yarn. Claims 11, 13, and 14 are analogous to the limitations of claims 4, 3, and 5, respectively. Claim 15 further limits the method of claim 9 to employing a hot brush and/or rotary tumbler dryer to confer a curl shape to the pile fibers.

5. Claims 1 and 4 are rejected under 35 USC 102(e) as being anticipated by US 6,155,306 issued to Katsukura et al.

Katsukura discloses a bulletproof woven fabric comprising multi-filament yarns of less than 10 dpf and 50-1600 denier per yarn (abstract). Said yarns are non-twisted multi-filament yarns (col. 1, lines 60-65 and col. 2, lines 1-17).

With respect to the present claim limitation that said yarn is "for mohair-like pile fabric," said limitation is not given patentable weight at this time because it merely describes an intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Thus, claims 1 and 4 are anticipated by the cited Katsukura patent.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-4 are rejected under 35 USC 103(a) as being obvious over JP 63-190083 assigned to Kuraray Co. Ltd.

Kuraray discloses a multifilament polyester yarn having 10-25 dpf and 0.5-3 crimps per inch (English abstract). The fiber has a flat ratio of 3-10. Said fiber is coated with a silicone resin and heat treated at 140-180 C. Said fiber is like animal hair and useful in sweaters.

Kuraray is silent with respect to the total yarn denier and the amount of twist. However, it would have been obvious to one of ordinary skill in the art to select the yarn denier and a twist

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frequency within the ranges claimed. Specifically, the claimed twist and denier values are known in the art and selection of each would be a matter of discovering an optimum value of result effective variables. *In re Boesch*, 205 USPQ 215. Factors determining yarn denier and twist frequency are desired coarseness or fineness of fabric, yarn and fabric strength, abrasion resistance, cover factor, etc. Therefore, claims 1-4 are rejected as being obvious over the cited prior art.

8. Claim 5 is rejected under 35 USC 103(a) as being obvious over the cited Kuraray reference in view of DD 226022 issued Gabrielski et al.

Kuraray does not teach an acrylic-based fiber. However, said fibers are well known in the art of animal hair-like textiles and, in particular, the art of mohair-like fabrics. For example, Gabrielski discloses synthetic mohair filaments comprising acrylonitrile polymer and having a non-circular cross-section (abstract). Thus, it would have been obvious to one of ordinary skill in the art to substitute acrylic-based filaments for the polyester filaments of Kuraray. It has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416.

9. Claims 5-9 are rejected under 35 USC 103(a) as being obvious over the cited Kuraray reference in view of US 3,930,106 issued to Mihara et al. and US 4,316,924 issued to Minemura et al.

Kuraray does not teach knitting the animal hair-like filaments into a pile fabric. However, knit pile fabrics are well known in the art of animal hair-like textiles. For example, Mihara teaches an animal hair-like synthetic fiber which can be knit into a pile fabric to produce a synthetic fur (col. 1, lines 5-9). In one embodiment, acrylic fibers are coated with spinning oil

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and knitted into a pile to simulate fox or mohair fur (Examples 3 and 4). The pile length may range from about 30-50 mm (col. 3, lines 25-34). Additionally, Minemura teaches a synthetic fiber for synthetic fur, wherein said fibers may be knitted into a pile fabric having a pile length of 10-50 mm (col. 2, lines 51-59). Also, it is noted that Mihara and Minemura both teach the use of acrylic-based fibers (Mihara, col. 3, lines 37-46 and Minemura, col. 2, lines 9-11). Thus, it would have been obvious to one of ordinary skill in the art to knit the multifilament yarn of Kuraray into a pile fabric having a pile length within the range claimed to produce a synthetic fur. Furthermore, it would have been obvious to one of ordinary skill in the art to substitute acrylic-based filaments for the polyester filaments of Kuraray since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416.

10. Claims 10-14 are rejected under 35 USC 103(a) as being obvious over the cited Kuraray, Mihara, and Minemura references, as applied to claim 9 above.

Although the cited prior art does not explicitly teach a double stitch knit, it would have been obvious to one of ordinary skill in the art to employ said knit. Selection of the type of knit stitch would be within the level of ordinary skill in the art. Hence, claim 10 is rejected as being obvious over the cited prior art.

With respect to claims 11-14, said claims are rejected for reasons analogous to claims 1 and 3-5 above. Thus, claims 10-14 are rejected over the cited prior art.

Allowable Subject Matter

11. Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not teach or fairly suggest the method of claim 9 which further includes the step of conferring a curl shape to the fibers of the mohair-like pile fabric by a hot brush and/or rotary tumbler dryer.

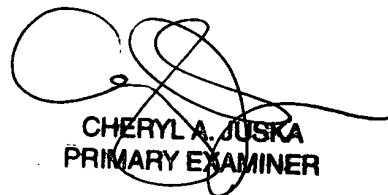
Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

13. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Cheryl Juska whose telephone number is 703-305-4472. The Examiner can normally be reached on Monday-Friday 10am-6pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


CHERYL A. JUSKA
PRIMARY EXAMINER

cj
June 29, 2003